CHAPTER 3

RESEARCH METHODOLOGY

This chapter discusses issues of definition and describes the methodology used in the conduct of this research. It enumerates the research objectives and explains how the survey instrument is designed, the scales are chosen and how the data collection is effected. This section ends with a description of the statistical techniques that are used in this research.

A Problem of Definition

Among the research objectives is the comparison of consumer ethnocentrism with local and foreign products. However, Malaysia is a open economy with many foreign products manufactured locally. Hence, it is felt that the issue of product origin should be defined. This problem of definition may be summed up as: What is a Malaysian product?

The issue becomes more apparent when viewed in the experience of a country such as South Korea. As recently as 30 years ago, South Korea imported most of its consumer goods such as rice cookers, irons, washing machines, electric clocks and motorcars. Today, however, South Korea manufactures all of these and more - And even exports them abroad to countries like Malaysia. Brand names like SAMSUNG, DAEWOO and LUCKY GOLDSTAR are typically Korean. But more importantly, they are manufactured of Korean technology and mainly made in Korea. Koreans can lay claim to these products as being Korean products.

By contrast, the Malaysian experience is the same. These same products are also manufactured in Malaysia but with a difference. They are assembled in Malaysia by foreign companies, use foreign technology and even foreign raw materials. Hence, the question posed is, 'Is a Sony Walkman assembled in Penang, a Malaysian product?', 'Is a National air-conditioner assembled in the Sungei-Way Free Trade Zone, a Malaysian product?', 'Is the so-called national car, the Proton Saga, a Malaysian product?' The answer to these questions is both 'Yes' and 'No'. The Sony Walkman and the National air-conditioner are considered foreign products but the Proton Saga is considered a Malaysian product. On the other hand, Goodyear NCT tyres, manufactured in Shah Alam, Selangor, are considered local tyres by motorcar owners even though Goodyear is a foreign company. But imported Goodyear Eagle tyres are considered foreign! The inference here is that ownership (local or foreign) of companies is not the only criteria for locals to consider whether a product is local or foreign. Another criteria seems to be familiarity. But it seems to go beyond that - after all, Malaysians are extremely familiar with National air-conditioners and yet consider a National air-conditioner, a foreign product. Perhaps the criteria could also be the perception in terms of the amount of local
resources, technology and expertise that go into the manufacture of a product. Many foreign products create employment in Malaysia and use substantial amounts of foreign and Malaysian resources. In particular, the Proton Saga, with eighty percent (80%) local content, is considered a Malaysian product despite its Japanese pedigree (Mitsubishi).

The concise definition of what constitutes a local product is obviously beyond the scope of this research. Fortunately, graduate executives, *ipsos factos*, have similar mindsets and we may safely presume from the above discussion that they generally have a common agreement as to what constitutes a foreign or local product. Hence, for the purpose of this research, a local product is generally a product that is made in Malaysia by a Malaysian-owned company (but not necessarily so). And, foreign products are manufactured by foreign-owned companies and generally imported (but not necessarily so).

**Who is a Graduate Executive?**

Although it may sound superfluous, the term 'Graduate Executive' is used to refer to graduates of universities who work as executives in organisations.

This term differentiates them from non-graduates who may also be working as executives in organisations. With this definition of terms, it is possible to identify, very clearly, the unit of analysis.

That is, this research is targeted at executives who are graduates of universities.

**Research Objectives**

This research is conducted to investigate the following:

1. To test the extent of consumer ethnocentrism among graduate executives in Malaysia,
2. To examine the relationship between consumer ethnocentrism and the constructs, namely, Patriotism, Conservatism and Openness,
3. To test the relationship between consumer ethnocentrism and demographic variables,
4. To examine the relationship between consumer ethnocentrism and the consumption of local vis-a-vis foreign products, including Proton, the national car, and
5. To identify some predictors of consumer ethnocentrism.
Research Design

The research objectives are developed and clearly defined after discussion and review with the research supervisor. Similarly, errors in planning, data collection, and data preparation and analysis are minimised by similar consultation. In the process, publications on statistical techniques and their interpretation are also studied.

The objective of testing for consumer ethnocentrism in graduate executives is achieved by application of the consumer ethnocentrism scale, the Cetscale. The study of convergent and discriminant validity of the Cetscale is conducted via correlation analysis with three (3) related constructs, namely, Patriotism, Conservatism and Openness.

To test for consumer ethnocentrism only, would make this research inadequate. As such, data on demographics are also collected and tested for significant relationships with consumer ethnocentrism. Subsequently, respondents' consumer ethnocentrism are tested against their preference for local and foreign goods. This is done to examine the hypothesis that consumer ethnocentrism should be positively correlated with a preference for local products.

A special section is devoted to the national car. Tests are conducted for consumer ethnocentrism in relation to purchase of the national car. This is of particular interest because the national car is heavily protected by tariff. The objective is to find out if respondents demonstrate the same degree of consumer ethnocentrism towards the national car with and without tariff protection.

Of particular interest is two (2) items that ask the respondents to indicate their opinions as to the quality of local products vis-a-vis foreign products, and their preference to buy local or foreign products given that they are about the same price. Lastly, multiple regression is utilised to determine some predictors of consumer ethnocentrism among graduate executives.

Selection of Measures

The type of measurement scales used are simple and complex. Complex multi-item scales from Sharma et al. (1995) are used to measure constructs such as consumer ethnocentrism, patriotism, conservatism and openness. Simple one (1) item scales are used to measure characteristics, usually demographic, of the respondents.

The multi-item scales, as originally created or adapted by Sharma et al. (1995) are interval scales (Likert) and the simple scales are the nominal level type. The patriotism, conservatism and openness scales are included in this research to examine the construct validity of the cetscale (measure of consumer ethnocentrism) within the context of Malaysian graduate executives. Essentially, patriotism and conservatism are used to test for convergent validity and openness is used to test for discriminant validity. This is to augment the examination of the cetscale's internal reliability using Cronbach's Coefficient Alpha.
**Instrument Design**

The design of the research instrument involves some modification to the original scales for measuring consumer ethnocentrism, patriotism, conservatism and openness. This is to suit local conditions.

The instrument is designed as follows:

**Language.** The language chosen is English. This is to preserve, as far as possible, the semantic accuracy and the nuances of the scales. Graduate executives in Malaysia do possess, at the minimum, a working knowledge of the English language. This renders Malay and Chinese language translations unnecessary, thus avoiding a rather clumsy and potentially troublesome source of inaccuracy.

The questions in the research instrument are worded very specifically and as simply as possible to maximise clarity of meaning. Additionally, the temptation to include every possible question is overcome by the selection criteria - only necessary questions should be included. This reduces clutter and keeps the instrument manageable. For the purpose of control, almost all questions are close ended.

**Adaptation.** The scales taken from Shimp and Sharma's (1987, 1995) work are taken almost in their entirety, with slight modifications to suit local conditions. For example, in the consumer ethnocentrism scale (cetscale), words referring to America are changed to Malaysia to relate it to the Malaysian context. Thus, 'I get very angry when foreigners speak very badly of America' is changed to read 'I get very angry when foreigners speak very badly of Malaysia'.

One (1) item in the conservatism scale is deleted because it is culturally incompatible with local conditions. The item is: Laws against cousin marriage are old fashioned and wrong. Whilst Americans are expected to disagree with this because cousin marriages are discouraged in their society; it is quite acceptable for cousins to marry in local Malay and Indian society.

**Pretesting.** The research questionnaire is pretested among Malay, Chinese and Indian graduate executives. Subsequently, syntax changes are made to achieve greater clarity in meaning and content and to minimise semantic confusion. This process is repeated two (2) times.
Scale Development. The scaling technique for the scales that are adapted from Sharma et al. (1995) are retained. It is the seven (7) point Likert scale which has a long history of reliability especially when it comes to ordering people with regard to a particular attitude (Davis et al. 1993). The Likert scale range is from ‘1 = Strongly Disagree to 7 = Strongly Agree’.

In keeping with their nature, items on respondents' demographic data are designed with answer formats based on dichotomous or simple multiple choice answers. That is, categorical, or non-scale answers. For example, the item ‘Where did you obtain your university degree?’ is answered by either ‘Local university’ or ‘Foreign University’. Similarly, the item on ‘race’ is answered by ticking off one (1) out of four (4) boxes that show ‘Malay’, ‘Chinese’, ‘Indian’ and ‘Others’.

Scales are also not used in the response formats on the items relating to respondents' preferences for local or imported goods. Respondents are merely asked to indicate their preferences by ticking off appropriate boxes. These items are not meant to measure attitudes but are created for correlation and comparative purposes with the consumer ethnocentrism construct.

Scale Sequencing and Layout. The research instrument is divided into three (3) sections. Section One (1) comprises the tendency/attitude scales measuring consumer ethnocentrism (cetscale), patriotism, conservatism and openness. This section begins with clear answering instructions and an illustrated example on how to answer the questions. All items from the four scales mentioned above are mixed in no particular order (random) to minimise bias.

Section Two (2) contains the items on the national car and local/foreign product preferences. The items are presented in random fashion. Clear answering instructions are stated at the beginning of the section. Section Three (3) contains the items on respondents' demographic data. In keeping with established practice, these sensitive data are kept to the last. These are questions on sex, age, income etcetera.

The layout of the research instrument is designed to enhance presentation and eliminate clutter. It is designed by a desktop publishing professional using a professional software - PageMaker.

Sampling Design
The sampling design is guided by the research objectives. That is, the study of consumer ethnocentrism among graduate executives. All graduate executives in Malaysia constitute the sample population. However, for reasons of practicality, the sample population is reduced to a sampling frame consisting of graduate executives in Kuala Lumpur.
The reason for choosing graduate executives is two (2) fold. Firstly, this is a pioneering study. Therefore, it should be premised on a distinct and well defined sample population. This should provide a good basis for wider ranging research in the future. Secondly, graduate executives - because of their education and overseas exposure - should exhibit a greater range in consumer ethnocentrism as compared to, say, the average citizen who is a non-graduate and has seldom left the country.

**Sampling Units.** The sampling units (units of analysis) are graduate executives working in Kuala Lumpur. They are identified by targeting at random, various organisations in the private and public sector.

**Sample Design.** A number of organisations are first identified. Then, through recommendations and cold calls, contact is established. Subsequently, the data collection process is effected.

**Sample Size.** The sample size is set at two hundred (200) respondents. In all, four hundred (400) questionnaires are sent out. Two hundred and thirty-three (233) questionnaires are returned. There were four (4) spoil questionnaires. Of the remaining two hundred and twenty-nine usable questionnaires, only two hundred and fourteen (214) comprise graduate executives and meet the research's unit of analysis criteria - graduate executives. The remaining fifteen (15) questionnaires are answered by non-graduate executives. They are dropped from the analysis.

The sample size is set at two hundred (200) respondents to capture a good racial representation. Care is taken to ensure that there are sufficient numbers of Malay, Chinese and Indian respondents in the survey to facilitate inter-ethnic comparisons.

**Data Collection Procedure**

This research, is the first one of its kind in Malaysia - there is no source of secondary data. From the outset, it is clear that this research would be based on primary data. The response nature of the information to be collected necessitates active data collection by way of the survey questionnaire. The actual conduct of the survey is impersonally done. That is, it is not done on a one on one, interviewer-interviewee basis. Instead, the questionnaire is self-administered via the drop-off method. Completed questionnaires are collected from the units of analysis (respondents) by way of follow-up visits. The drop-off self-administered method is preferred because it eliminates interview bias. The unit of analysis can complete the questionnaire at her own leisure without feeling stressed.

The data collection is assisted by MBA students of the University of Malaya. Data collection takes place over a period of three (3) weeks.
Data Analysis Techniques

The techniques used in this research are commonly found in most books on data analysis. They are known for their robustness and are proven techniques. The software that is used is SPSS PC+ (Statistical Package for Social Science. Personal Computer version)

The following techniques are used in this research:

**Frequencies.** Frequencies are used to obtain a descriptive picture of the respondents. This includes a description of Means, Medians and Minimum/Maximum values.

**Reliability.** The test on internal reliability using Cronbach's Coefficient Alpha is utilised. This is used to re-confirm the robustness of the four (4) scales, namely, CETSCALE, PATRIOTISM, CONSERVATISM and OPENNESS.

**Correlation with plot.** Correlations are used to test for the direction and strength of correlation between the CETSCALE and PATRIOTISM, CONSERVATISM and OPENNESS. The aim is to test for validity and internal reliability of the cetscale. Plots are run for visual correlation.

**One-way Anova.** One-way Anova is used to test relationships where there is a causal relationship between one independent and one dependent variable. For example, in trying to determine if age has an effect on consumer ethnocentrism.

**Two-way Anova.** Two-way Anova is similar to one-way anova with the additional feature that it compares one (1) dependent variable and two (2) independent variables. In two-way Anova, one can also test for interaction between the two (2) independent variables.

**T-Test.** T-Tests are employed for straightforward cases involving one (1) dependent variable and one (1) independent variable. However, the independent variable may consist of only two (2) categories; or two distributions.

**Multiple Regression.** The objective of this research is to study consumer ethnocentrism among graduate executives. The research concludes by trying to identify some variables that could act as predictors of consumer ethnocentrism among graduate executives.

There are various techniques of regression. The 'forward' technique is used. This technique introduces predictors one-by-one in the order of highest Multiple R (the degree of correlation with the dependent variable); subject to a default cutoff value of PIN = 0.05 (the probability criteria to enter a variable into the regression equation).